Title (en)

ELECTRODE CATALYST FOR FUEL CELL, AND SOLID POLYMER FUEL CELL USING THE ELECTRODE CATALYST

Title (de)

ELEKTRODENKATALYSATOR FÜR EINE BRENNSTOFFZELLE UND FESTPOLYMERBRENNSTOFFZELLE MIT DEM ELEKTRODENKATALYSATOR

Title (fr)

CATALYSEUR D'ÉLECTRODE POUR PILE À COMBUSTIBLE, ET PILE À COMBUSTIBLE À POLYMÈRE SOLIDE UTILISANT LE CATALYSEUR D'ÉLECTRODE

Publication

EP 2178141 A4 20120627 (EN)

Application

EP 08778194 A 20080709

Priority

- JP 2008062777 W 20080709
- JP 2007182730 A 20070712

Abstract (en)

[origin: EP2178141A1] This invention provides a fuel cell electrode catalyst in which at least one transition metal element and at least one chalcogen element are supported on a conductive support, wherein the fuel cell electrode catalyst comprises a core portion comprising a transition metal crystal and a shell portion comprising surface atoms of the transition metal crystal particle and chalcogen elements coordinating to the surface atoms, and the outer circumference of the core portion is being partially covered with the shell portion. The fuel cell electrode catalyst has a high level of oxygen reduction performance, high activity as a fuel cell catalyst and comprises a transition metal element and a chalcogen element.

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

- [X] DE 10035841 A1 20010315 - HAHN MEITNER INST BERLIN GMBH [DE]
- [X] EP 1772916 A2 20070411 - SAMSUNG SDI CO LTD [KR]
- See references of WO 2009008544A1

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